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Storage, Handling, Preparation, Installation and Post Installation Protection Instructions and Guidelines

The purpose of this manual is to provide general installation recommendations based on certain installation environments. If there are other questions about a specific issue not covered in this manual, please contact Parterre Technical Support by phone 888.338.1029 or email: techsupport@parterreflooring.com.

INTRODUCTION

Parterre Flooring Systems offers a variety of solid vinyl tile and planks with a full spectrum of patterns, colors and designs. Parterre Flooring Systems solid vinyl tile and plank has been engineered and designed to provide a high performance, durable, pliable flooring product suited for environments ranging from heavy trafficked pedestrian zones to classrooms.

Considerations suitable for Parterre Flooring Systems solid vinyl tile and plank flooring use include (and are not limited to): corporate/office, hospitality, retail, healthcare, educational and multi-family.

As with all flooring, the long-term performance and ease of maintenance is dependent on compulsory items necessary to extend the floor's life and keep it looking good. Walk off mats at entry ways, proper floor protectors on all furniture, tables and chairs and furniture moving aids utilized during the moving of heavy items are all key components for peak and long term performance of Parterre Flooring Systems solid vinyl tile and plank flooring.

MATERIAL RECEIVING

Upon receipt of material, immediately remove any wrapping and inspect for damage and verify that the correct product and color was received. Do not drop cartons as this may cause damage.

STORAGE, HANDLING AND TRANSPORTING OF MATERIALS

Parterre Flooring Systems solid vinyl tile and plank flooring requires care during storage and handling as do all floor covering products, their adhesives and all the ancillary items for floor preparation and finishing.

It is critical to store the plank and/or tile in a dry, temperature-controlled interior environment. The temperature range should be no lower than 65° F and no greater than 80° F and the relative humidity should be controlled and maintained between 30-70% rH.

Parterre Flooring Systems solid vinyl tile and plank flooring is packaged in cartons which must be kept squarely positioned on the pallet to prevent distortion of the contents and to be fully supported during storage. All cartons containing vinyl tile or plank flooring should be stored on a dry, flat, level surface. **DO NOT STORE CARTONS ON EDGE.** Stored cartons must be protected from forklift and other traffic that can damage carton corners. Check specific product instructions to determine maximum carton stacking on pallets, but **NEVER** double-stack pallets of Parterre Flooring Systems solid vinyl tile and plank flooring, even for short term management of the inventory.

Handling cartons of Parterre Flooring Systems solid vinyl tile and plank flooring flooring can be heavy and bulky. Always use proper material handling equipment when moving these products. When handling cartons, always use proper lifting techniques and never lift more than you can safely handle. Ensure that products and pallets are fully supported during transportation. Even distribution of the secured material is compulsory in your truck or van to avoid load shifting or movement. Rough handling can damage Parterre Flooring Systems solid vinyl tile and plank flooring before installation. Avoid delays during the installation by simply exercising care when handling and transporting these products.

PRE-INSTALLATION PRECAUTIONS AND CHECKLIST

Before starting the project, take a few moments and check the flooring materials to ensure that you have the correct pattern, style and color. In addition to checking the flooring materials, make sure the correct adhesive and amount of adhesive required to complete the installation has been ordered. Also, any ancillary items that may be required to successfully complete the installation should be on hand as well, for example, transition moldings, cove base, shoe moldings, patching compounds, vapor reduction systems etc. Care should be taken in understanding the limits of all ancillary materials to ensure their compatibility with Parterre Flooring Systems solid vinyl tile and plank flooring, their adhesives and warranties. All complimentary materials required to complete the installation will be warranted by the respective manufacturer.

Most critical prior to commencement of the installation, confirm the correct amount of material with sequential production or run numbers to avoid any deviation in gloss, color, design or pattern. Parterre Flooring Systems **will not pay labor charges on claims filed for materials installed with obvious visible defects.** If during the course of installation, you discover visible

defects, stop the installation immediately and contact your sales representative or Parterre Technical Support for instructions as how to proceed.

Every job is unique in its expectations and requirements. Prior to commencement of work, be certain of job specific requirements for layout, sequence, tile orientation, jobsite limitations, etc. and expectations for completion before starting the job. **If you have any doubt about proceeding, then stop and contact Parterre Technical Support.**

JOBSITE CONDITIONS

Parterre Flooring Systems solid vinyl tile and plank flooring, accessories and adhesives are intended for interior applications only.

The environment and the condition of the substrate play a key role in assuring a successful flooring product installation. If the environment is not climate-controlled or the substrate is not structurally sound, the chances for a successful flooring installation radically reduced.

Temperature and humidity play a vital role in a successful installation. Do not install Parterre Flooring Systems solid vinyl tile and plank flooring in any environment that does not or cannot be climate controlled. Ideally the permanent HVAC should be operational and should be running continuously three weeks prior to the Parterre Flooring Systems solid vinyl tile and plank flooring installation to not only climatize the environment but sufficiently acclimate the substrate. The jobsite should be maintained at a minimum temperature of 65°F and should not exceed 80°F for a minimum of 72 hours prior to installation, during installation and 72 hours after installation, along with the material, adhesives, patch and other temperature/humidity sensitive ancillary items and/or materials. The range for relative humidity should be between 25% and 65% relative humidity during this time as well. After the flooring is installed, make sure the temperature does not fall below 55°F or exceeds 100°F and the interior environment continues to be a climate-controlled space. Failure to control the interior environment can adversely affect the performance of the flooring along with its adhesives as well.

The structural integrity of the job site's substrate is a critical component of the long term performance of the Parterre Flooring Systems solid vinyl tile and plank flooring. The type and method of substrate construction, grade level, substrate system and its composition can impact the installation of the Parterre Flooring Systems solid vinyl tile and plank flooring. Often, local building codes establish minimum requirements and may result in insufficient rigidity, flatness or smoothness.

Structural substrate systems are comprised of either concrete (or cement-like materials) or wood. The substrate systems described in these installation guidelines are provided to give

flooring installers accurate information to make solid decisions regarding a substrate system they may encounter on various jobsites. For comprehensive, detailed information regarding each of these systems, contact The American Concrete Institute or The American Plywood Association.

Other critical details captured when visiting the job site, allows for field measurements, making sure all the other trades have completed their work and are no longer occupying the space and finally making sure that lighting is operating so that both the preparation of the substrate and flooring installation can both be done in a well-lit area.

IMPORTANT: Commencement of the flooring installation means acceptance of the existing underfloor and site conditions on behalf of the flooring contractor.

Always broom sweep, vacuum and/or mop to make sure the installation surface completely clean. Ensure that the surface is completely dry prior to installation. This step may uncover deficiencies that could negatively impact your installation, allowing you to notify the customer of the potential problems before taking ownership of the installation.

SUBFLOOR/UNDERFLOOR RECOMMENDATIONS & PREPARATION

Concrete Underfloors

Concrete underfloors must be constructed in accordance with the American Concrete Institute (ACI) 302, 1R-95 Guide for Concrete and Slab Construction. The concrete underfloors must have minimum compressive strength of 3500 psi, a minimum dry density of 115 lb./ cubic foot, minimum concrete mix water/cement ratio of less than 0.45 and must be finished and cured according to ACI. Parterre Flooring Systems solid vinyl tile and plank flooring must be installed over concrete underfloors conforming to ASTM F710 for concrete and other monolithic floors.

Concrete underfloors **MUST** be dry, clean, smooth, flat (must not deviate more than 3/16" in 10' or must not exceed 1/32" in span of 12") and structurally sound and free of contaminates such as grease, oils, paint and/or old adhesive. Surface contaminates should be considered any substance that would prohibit or interfere with the bond of the Parterre Flooring Systems solid vinyl tile and plank flooring to the concrete underfloor, such as paints, solvents, oils, existing adhesives and/or curing or parting compounds. Surface contaminates must be mechanically removed, **NEVER** use chemicals or solvents to remove concrete underfloor surface contaminates. In addition, surface defects or deficiencies must be corrected before installing flooring product. Low spots, cracks, holes and other irregularities can be patched using a high quality Portland cement patching compound engineered and warranted by the manufacturer for this purpose by following their written instructions for mixing and application. Any sanding or grinding that generates dust must be removed using a HEPA vacuum to insure a dust free

underfloor before patching or leveling and installing the Parterre Flooring Systems solid vinyl tile and plank flooring.

Do not install Parterre Flooring Systems solid vinyl tile and plank flooring over expansion joints. Cut the Parterre Flooring Systems solid vinyl tile and plank flooring neatly and uniformly to each side of the joint and carefully fill with elastomeric polyurethane joint filler or cover the joint with an expansion joint plate cover. Other types of concrete joints such as construction control and/or saw cuts can be filled, smoothed and leveled using an appropriate Portland cement patching compound.

Moisture Vapor and pH Testing

Vapor emissions from concrete substrates must not exceed 5 lb. per 1000 s/f using the Calcium Chloride Test Method (ASTM F 1869) and not exceed 80% internal concrete relative humidity as tested in accordance with ASTM F 2170. A pH test should be conducted on all concrete substrates, regardless of age of the concrete or grade level. The acceptable pH level of the substrate surface should range between 7-9.9. If any one of the limits of the aforementioned tests is exceeded, **DO NOT INSTALL** Parterre Flooring Systems solid vinyl tile and plank flooring. In cases with alkalinity above 9.9, neutralize the substrate surface until the pH readings are below 9.9.

Vapor Reduction Systems can be a viable option when encountering concrete underfloors that have documented excessive vapor emissions, especially when the concrete is 3-6 months old or older. Final determination of a Vapor Reduction Systems' suitability and its warranties regarding its performance and and/or any damage that may be caused to the Parterre Flooring Systems solid vinyl tile and plank flooring and their adhesives due to deficiencies in the Vapor Reduction System are the responsibility of the Vapor Reduction System manufacturer and the flooring installer.

Radiant Heated Floors

Parterre luxury vinyl flooring products (tile and plank) may be installed on radiant heated slabs providing the heating system will be controlled to never exceed a temperature of 85°F, measured directly over the heating pipes. Contact Parterre Technical Support for specific recommendations.

At any time the radiant heated floor has been allowed to cool after installation, there is a possibility of moisture will be absorbed into the concrete subfloor. Accordingly, it is recommended that when temperature is increased, it be gradual to prevent moisture from adversely affecting the adhesive bond.

Hot water pipes are usually embedded beneath concrete or gypsum toppings. ASTM F710 has

minimum requirements for commercial use as follows:

- Surface cracks, grooves, depressions, control joints or other non-moving joints, and other irregularities shall be filled or smoothed with latex patching or underlayment compound recommended by Parterre (the flooring manufacturer) for filling or smoothing, or both.
- Patching or underlayment compound shall be moisture-, mildew-, and alkali-resistant, and, for commercial installations, shall provide a minimum of 3000 psi compressive strength after 28 days.
- At the time of installing the flooring material, the temperature of the floor and the room shall be 65°-75°F.

Wood Underfloors

All wood underfloor systems should be suspended at least 18" above the ground with adequate cross-ventilation. Always cover the ground surface of the crawl space with a suitable vapor barrier. All wood underfloors must be structurally sound, dry and must comply with local building codes. Wood underfloors should be double-layer construction with a minimum total thickness of 1" and must be solidly fastened to appropriately space floor joists. This underfloor should be covered with a minimum 1/4" thick APA Underlayment Grade Plywood or other underlayment panel approved and warranted beneath resilient flooring. Follow the panel manufacturer's instructions for panel layout, fastener type, fastener length, fastener spacing and approved panel patching protocol. Be aware that many double-layered plywood underfloors may have panels that carry the American Plywood Association (APA) performance rating of Sturd-I-Floor, a panel that was designed as a combination subfloor/underlayment panel, but due to construction traffic and weather exposure becomes damaged, therefore, in this situation Parterre Flooring Systems recommends simply installing an approved APA minimum 1/4" underlayment panel or TECPLY® brand 5-ply arctic birch plywood over the Sturd-I-Floor.

Existing Resilient Floor Coverings

Occasionally existing resilient floor coverings may be present and it is important to know that installation over these existing resilient floors with Parterre Flooring Systems solid vinyl tile and plank flooring can compromise the performance properties of the Parterre Flooring Systems solid vinyl tile and plank flooring dramatically if several key factors are NOT considered before installation. The performance of Parterre Flooring Systems solid vinyl tile and plank flooring directly is completely dependent on the condition and ongoing/continued bond of the existing resilient floor covering.

The key factors critical to the installation of Parterre Flooring Systems solid vinyl tile and plank flooring over existing resilient floor covering are as follows. The existing resilient floor covering must meet the subsequent conditions:

- Be fully adhered (full spread installation only) and must be well bonded to a suitable substrate as described in the aforementioned section titled **SUBFLOOR/UNDERFLOOR RECOMMENDATIONS & PREPARATION**
- Consist of a single layer of existing resilient flooring only
- Must be free of any evidence of alkaline salts, hydrostatic pressure, or excessive moisture from the underfloor that it is installed
- Cannot be heavy cushioned or a foamed backed existing resilient floor
- Cannot be a perimeter-fastened or loose-laid existing resilient floor
- Cannot be self-stick tile, rubber tile, asphalt tile, or surface containing any residual asphalt-based adhesives

IMPORTANT: The floor covering retailer or flooring installer must determine if the existing resilient floor covering is a suitable underfloor for the installation of **PARTERRE FLOORING SYSTEMS Solid Plank and Tile flooring**. If there is any doubt regarding existing resilient floor covering's suitability, remove it or cover it with the appropriate underlayment.

Removal of Existing Resilient Floor Coverings

WARNING: Do not sand, dry-sweep, dry-scrape, drill, saw, beadblast or mechanically chip or pulverize existing resilient flooring, backing, felt lining or asphaltic "cutback" adhesives. These products may contain either asbestos fibers or crystalline silica. Avoid creating dust. Inhalation of such dust containing respirable fibers or crystalline silica may cause cancer and respiratory tract diseases. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must assume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.

A brochure from the Resilient Floor Covering Institute entitled *Recommended Work Practices for Removal of Resilient Floor Coverings* provides a defined set of instructions for removing all resilient floor covering types.

IMPORTANT: Various federal, state and local government agencies have regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor covering material that contains, or is presumed to contain asbestos, you must review and comply with all applicable regulations.

Mold and Mildew

Prior to removing an existing resilient floor following the RFCI Recommended Work Practices for Removal of Resilient Floor Coverings (unless state or local law requires other measures) or installing a new floor, if there are visible indications of mold or mildew or the presence of a strong musty odor in the area where resilient flooring is to be removed or installed, the source of the problem should be identified and corrected before proceeding with the flooring work. In virtually all situations, if there is a mold issue, there is or has been an excessive moisture issue. Visible signs of mold or mildew (such as discoloration) can indicate the presence of mold or mildew on the subfloor, on the underlayment, on the back of the flooring, and sometimes even on the floor surface. If mold or mildew is discovered during the removal or installation of resilient flooring, all flooring work should stop until the mold/mildew problem (and any related moisture problem) has been addressed. Before installing the new resilient flooring, make sure the underlayment and/or subfloor is thoroughly dry and that any residual effect of excessive moisture, mold, or structural damage has been corrected. To deal with mold and mildew issues, you should refer to the U.S. Environmental Protection Agency (EPA) guidelines that address mold and mildew. Depending on the mold or mildew condition present, those remediation options range from cleanup measures using gloves and biocide to hiring a professional mold and mildew remediation contractor to address the condition. Remediation measures may require structural repairs such as replacing the underlayment and/or subfloor contaminated with mold and mildew as a result of prolonged exposure to moisture. The EPA mold guidelines are contained in two publications "A Brief Guide to Mold, Moisture and Your Home" (EPA 402-K-02-003) and "Mold Remediation in Schools and Commercial Buildings" (EPA 402-K-01-001). Appendix B of the "Mold Remediation in Schools and Commercial Buildings" publication describes potential health effects from exposure to mold, such as allergic and asthma reactions and irritation to eyes, skin, nose and throat. These publications can be located on EPA's website at: www.epa.gov/iaq/molds

Specialty Underfloors

Specialty underfloors that may be suitable for the installation of Parterre Flooring Systems solid vinyl tile and plank flooring include properly prepared ceramic/porcelain tiles, cement based Terrazzo, poured (seamless) floors and metal floors. Always follow your patch/leveling compound manufacturer for guidelines on preparing these substrates to accept Parterre Flooring Systems solid vinyl tile and plank flooring with **no guarantee or assurance from**

Parterre Flooring Systems for successful and/or satisfactory results and with no liability to Parterre for unsuccessful and/or unsatisfactory results.

ADHESIVES

Determining Slab Porosity

The flooring contractor must determine slab porosity to choose the preferred adhesives and procedures.

Ensure surface is dust free prior to performing the following test. Permit surface to dry completely before performing additional activities.

To determine if a subfloor is porous, place two droplets of water in various areas. If the subfloor is porous, the water will be absorbed within 45-60 seconds.

#249P Pressure Sensitive Adhesive

Parterre #249P is a premium acrylic emulsion that combines the excellent performance of a pressure sensitive adhesive with environmental safety characteristics. #249P is releasable, non-flammable, non-hazardous and water resistant. It provides a strong, long lasting bond. #249P is designed for the installation of dimensionally stable vinyl tile and plank in a releasable application. Due to its pressure sensitive characteristics, #249P eliminates concern about installing a non-porous backed floor covering over a non-porous substrate.

SUBFLOOR PREPARATION

#249P can be used over all grade levels of concrete in the absence of excessive moisture and alkalinity. Moisture tests are required on all concrete subfloors regardless of grade level if the concrete is freshly poured or is classified as an older slab. Moisture testing should be performed by ASTM F1869 Calcium Chloride Tests with moisture levels not to exceed Five (5) pounds per Twenty-Four (24) hours per one thousand (1000) square feet or ASTM F2170 In Situ Relative Humidity Test with moisture levels not to exceed eighty (80) percent on concrete slabs. Additional information regarding these tests and results can be obtained through Parterre's Technical Support.

DIRECTIONS

1. Refer to all Parterre's recommendations prior to installation to determine suitability of all materials to be used, approved substrates, subfloor preparation, etc.
2. Subfloor must be clean, dry, smooth and free of any contamination, which may interfere with the adhesive bond.
3. Where subfloor is extremely porous, adhesive absorption may be in question, therefore it is recommended that the subfloor be primed with a recommended primer.
4. Refer to all Parterre's recommendations regarding layout, cutting, seaming and maintenance.
5. Spread adhesive using the recommended trowel. Use the dry installation method in "tile over tile" applications and for situations requiring a releasable installation.
6. Roll floor covering immediately with 100 lb. 3-section roller.
7. Do not wet clean floor covering for a minimum of 14 days. This will allow the adhesive to properly cure.
8. Once adhesive turns clear, floor covering must be placed within 2-4 hours **MAXIMUM**.
9. For wall installations of LVT use a 3/8" short nap roller. Full spread only (no perimeter installation). Allow the adhesive to become dry to the touch (no transfer to finger), and install tile.

RECOMMENDED SUBSTRATES

- Concrete
- Properly prepared Gypsum
- Terrazzo
- Radiant heated subflors
- Portland based underlayments
- APA approved plywood

- Fiber cement underlayment
- Properly prepared VCT (single layer)

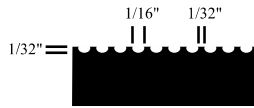
RESTRICTIONS

1. Refer to flooring manufacturer for recommendation.
2. For Interior installations only.
3. Do not install over adhesive residue including cutback.
4. Do not install when MVER is over 5 lb. per 1,000 sf per 24 hours, per ASTM F1869.
5. Do not install when relative humidity is over 80%, per ASTM F2170.
6. Do not install when ambient temperature is not between 65°F and 80°F.
7. Do not install when ambient relative humidity is not between 25% and 65%.
8. The dimensional stability of some vinyl flooring products is very sensitive to fluctuations in ambient environment conditions. Parterre Flooring Systems is not responsible for installation issues caused by dimensional changes in flooring.
9. It is the sole responsibility of the installer to determine the suitability and compatibility of the adhesive for the user's intended use.

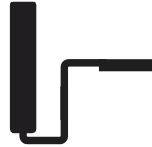
CLEAN-UP

Remove wet adhesive immediately with a damp cloth. Use Mineral Spirits to remove dried adhesive. **CAUTION: Mineral Spirits are flammable. Read and follow all precautions on container label.**

TROWEL RECOMMENDATIONS



2mm & 3mm Products



For plank and tile wall application

PHYSICAL PROPERTIES

- Drying time is 30-45 minutes depending on ambient conditions
- Working time is 2-4 hours
- Shelf life is one year in unopened container
- Moisture Vapor Emission: 5 lb. per ASTM F-1869, 80% per ASTM F-2170
- pH must be between 7-10
- Freeze thaw stable 5 cycles at 20°F

#539P Acrylic Adhesive

Parterre #539P is a premium, non-staining, acrylic adhesive to permanently install resilient flooring on porous and non-porous subfloors. Parterre #539P is for all grade levels of concrete, on, above, and below grade, in the absence of moisture, and for suspended double sheeted, structurally sound wood floors (APA). This adhesive is non-flammable, water and alkali resistant and freeze-thaw stable as determined by ASTM Test Method D 7149. Parterre #539P has excellent resistance to plasticizer migration and sets to a tough, hard, permanent bond.

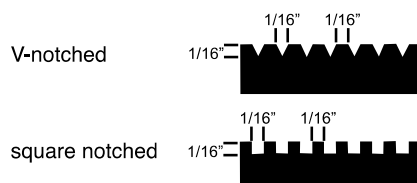
SUBFLOOR PREPARATION

All subfloors shall be clean, dry, free of dust, dirt, wax, paint, grease, and all other extraneous materials that might interfere with the adhesive bond. Cracks and uneven surfaces must be filled with an approved cement based patching compound. It is essential that moisture testing shall be performed on all concrete subfloors regardless of

grade level or whether the concrete is freshly poured or is classified as an older slab. Moisture testing shall be performed as per ASTM F 1869 Calcium Chloride Test with moisture levels not to exceed six (6) pounds per twenty-four (24) hours per one thousand (1000) square feet, or as per ASTM F 2170 In Situ Relative Humidity Test, with relative humidity (Rh) moisture levels not to exceed seventy-five (75) percent. If the test results exceed the limitations, installation shall not proceed until the moisture level lowers to an acceptable level, or the moisture is properly mitigated. Additional information with regards to subfloor installation and requirements can be found in ASTM F 710.

INSTALLATION INFORMATION

1. Flooring materials and adhesive shall be acclimated to the installation area for a minimum of 24-48 hours prior to commencing installation.
1. The area to receive flooring shall be fully enclosed, weather tight, with the permanent HVAC system set and maintained at a minimum temperature of 65° for a minimum of 48 hours prior to, during and after installation.
2. Parterre #539P is recommended for porous and non-porous applications.
3. Note: It is the responsibility of the installing party to determine the porosity of the subfloor being covered. To determine if a subfloor is porous, place two droplets of water in various areas. If the subfloor is porous, the water will be absorbed within 45-60 seconds.
4. Use a 1/16" x 1/16" x 1/16" V notch trowel for materials equal to or less than 0.080 inches or 2mm.
5. Use a 1/16" x 1/16" x 1/16" square notch trowel for materials thicker than 0.080 inches or 2mm.
6. Replace worn trowels to ensure proper spread rate. (DO NOT RE-NOTCH)



7. For porous applications, once troweled, the adhesive shall remain open (flash-off) for approximately 5-10 minutes before placement of the flooring.

8. After placing the flooring into the adhesive, it shall be rolled immediately utilizing a 100 lb, three section roller.
9. For non-porous applications, the adhesive shall be allowed to dry to the touch with little or no transfer of adhesive to the finger.
10. When the adhesive is dry to the touch, it is ready to accept flooring material.
11. Roll immediately after the flooring has been placed into the adhesive with a 100 lb roller.
12. From the time the adhesive is dry to the touch, to the time it must be covered, there is 45-60 minutes of working time, depending on temperature and humidity. The adhesive must be pliable for the installation to proceed.
13. If the adhesive remains uncovered after it initially dries to the touch, for periods longer than the recommended time, a loss in adhesion strength will result. Care shall be taken by the installer not to spread more adhesive than can be worked within the recommended time frame. Chatter will be heard if fingernail is run across the beads of adhesive. NOTE: If any questions exist by the installer or floor-covering dealer as to whether or not this product is appropriate, contact Parterre Technical Support.
14. Follow Parterre Flooring Systems' installation instructions and full recommendations.
15. Prevent all traffic for a minimum of 24 hours and heavy traffic and rolling loads for 72 hours.
16. Do not wash or clean the floor for a minimum of 3-5 days after installation is completed to allow adhesive to achieve proper adhesion.

Additional Details:

- Shelf life is one year at 70°F in un-opened container.
- Coverage is approximately 125-175 sq. ft. per gallon or 13-20 sq. yd. per gallon.
- Cleanup using soapy water followed by mineral spirits. **DO NOT APPLY SOLVENT DIRECTLY TO FLOORING MATERIAL.**

LIMITED WARRANTY

The #539P Acrylic Adhesive is manufactured to exacting standards. User shall determine suitability for this product for a particular use. Manufacturer's and seller's obligation is limited to replace such quantity of the product proved to be defective. Neither the manufacturer nor the seller shall be liable for any damage, injury, or loss, direct or consequential arising out of the use, misuse or inability to use this product.

#549P Premium Vinyl Tile Adhesive

Parterre #549P is a premium vinyl tile adhesive is a solvent free adhesive formulated for the installation of Parterre Flooring Systems solid vinyl tile and plank flooring, and vinyl backed resilient sheet flooring. This high strength adhesive is designed for installations over porous and non-porous substrates.

SUBFLOOR PREPARATION

Follow all manufacturer's recommendations and industry standards regarding subfloor preparation. Moisture tests are required on all concrete subfloors regardless of grade level or if the concrete is freshly poured or is classified as an older slab. Moisture testing should be performed by ASTM F1869 Calcium Chloride Tests with moisture levels not to exceed five (5) pounds per twenty-four (24) hours per one thousand (1000) square feet, or ASTM F2170 In Situ Relative Humidity Test with readings not to exceed eighty (80) percent on existing slabs. New Construction Projects or Green slabs can have a Moisture Vapor Emission Rate of up to eight (8) pounds per twenty-four (24) hours per one thousand (1000) square feet or 90% when tested in accordance with ASTM F2170. Additional information with regards to these tests and results can be obtained through Parterre Technical Support. The maximum pH levels should not exceed a reading of 10.

DIRECTIONS

Refer to all manufacturer's recommendations and approvals prior to installation. For Indoor Use Only. For best results install at 70°F (+/- 5°) and 50% R.H. (+/-5%). Spread adhesive using the recommended trowel (see trowel guide below). When installing over a porous substrate the flooring can be laid into wet or dry adhesive. For a wet lay installation spread the adhesive, wait approximately 10-15 minutes to allow the adhesive to flash off. Laying in wet will allow for movement of the flooring until adhesive has set. When installing tile or vinyl plank it is recommended to let the adhesive dry to the touch

before installing. When installing over a non-porous substrate, the adhesive must be allowed to dry completely (dry to the touch) before laying flooring (see recommended trowel guide when installing over non-porous substrates). The dry time will depend on the temperature & humidity of the environment. Once the flooring is installed roll the whole installation with a 100 lb. three-section roller to assure adhesive has made proper contact with flooring.

RECOMMENDED SUBSTRATES

- Concrete
- Properly prepared Gypsum
- Advan Tech
- Fiber cement underlayment
- Properly prepared VCT (single layer)
- Portland based underlayments
- APA approved plywood
- Terrazzo
- Radiant heated subfloors
- Properly prepared sheet vinyl (single layer, fully adhered)

RESTRICTIONS

1. For Interior installations only.
2. Do not install when MVER is over 8 lb. per 1,000 sq. ft. per 24 hours, per ASTM F1869.
3. Do not install when relative humidity is over 90%, per ASTM F2170.
4. Do not install when ambient temperature is not between 65°F and 80°F.
5. Do not install when ambient relative humidity is not between 25% and 65%.
6. The dimensional stability of some vinyl flooring products is very sensitive to fluctuations in ambient environment conditions. Parterre is not responsible for installation issues caused by dimensional changes in flooring.
7. It is the sole responsibility of the installer to determine the suitability and compatibility

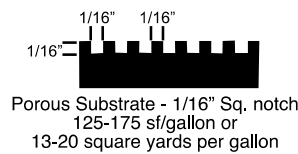
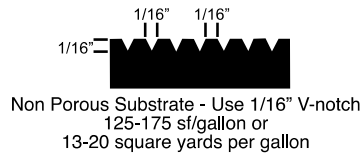
of the adhesive for the user's intended use.

CLEAN-UP

Remove wet adhesive immediately with a damp cloth. Use Mineral Spirits to remove dried adhesive. **CAUTION: Mineral Spirits are flammable. Read and follow all precautions on container label.**

TROWEL RECOMMENDATIONS

TROWEL RECOMMENDATIONS:



TECHNICAL DATA

| | |
|--------------------------------|--|
| Base Polymer | Acrylic Polymer |
| Color | Light Straw |
| Solids | 70-75% |
| VOC Content | <1 gram per liter |
| pH | 7.5 |
| Consistency | Paste |
| Trowelability | Light, Easy |
| Shelf Life | One Year in Unopened Container |
| Storage | 40°-95°F |
| Application Temperature | 65°-95°F (18°-35°C) |
| Traffic Restrictions | Foot Traffic after 12 hrs, Heavy Traffic after 24hrs |
| Open Time | Up to 2 hours (non-porous substrate) |

| | |
|------------------------------|-----------------|
| Freeze Thaw Stability | 5 cycles @ 20°F |
|------------------------------|-----------------|

2-Part Epoxy Resilient Adhesive

Parterre Royal Epoxy resilient adhesive is specially formulated for the use with a wide range of resilient flooring, including, rubber, vinyl and vinyl to vinyl installations. When properly mixed together this system provides a tenacious yet, flexible film.

SUBFLOOR PREPARATION

Follow all Royal's recommendations and industry standards regarding sub-floor preparation. Moisture tests are required on all concrete subfloors regardless of grade level or if the concrete is freshly poured or is classified as an older slab. Moisture testing should be performed by ASTM F1869 Calcium Chloride Tests with moisture levels not to exceed Eight (8) pounds per twenty-four (24) hours per one thousand (1000) square feet, or ASTM F2170 In Situ Relative Humidity Test with readings, not to exceed eighty (85) percent on existing slabs. New Construction Projects or Green slabs can have a Moisture Vapor Emission Rate of up to Ten (10) pounds per twenty-four (24) hours per one thousand (1000) square feet or 90% when tested in accordance with ASTM F-2170. Additional information with regards to these tests and results can be obtained through Royal's Technical Service Department. The pH levels should be between 7-10.

INSTALLATION INFORMATION

Refer to all manufacturer's recommendations and approvals prior to installation. For Indoor Use Only. For best results install at 70°F (+/- 5°) and 50% R.H. (+/- 5%).

All surfaces must be clean, dry, free of dust, grease, paints, oils, curing compounds, sealers, or any other foreign material which may interfere with proper adhesion. Cracks and uneven surfaces must be filled with a cementitious patching compound.

PRODUCT MIXING

Thoroughly pre-mix part B, for approximately 1 minute before pouring contents into part A. This will make the adhesive thinner and easier to pour. All contents of part B must be poured into part A. Then mix with a low speed drill using an appropriate spindle for 3

minutes or until the contents are thoroughly mixed.

CAUTION: Do not allow adhesive to remain uncovered after the initial drying period as a loss of adhesion strength will occur. Do not spread more adhesive than can be worked within a 45-minute timeframe. Royal 2-part epoxy has an open time up to 1 hour in most applications.

RECOMMENDED SUBSTRATES

- Concrete
- Portland based underlayments
- Properly prepared Gypsum
- APA approved plywood
- Terrazzo
- Fiber cement underlayment
- Radiant heated sub-floors
- Properly prepared VCT (single layer)
- Properly prepared sheet vinyl (single layer, fully adhered)

PRODUCT MIXING

- For Interior installations only.
- Do not install when MVER is over 8 lbs. per 1,000 sq. ft. per 24 hours, per ASTM F1869.
- Do not install when relative humidity is over 90%, per ASTM F 2170.
- Do not install when ambient temperature is not between 60°F and 95°F.
- Do not install when ambient relative humidity is above 65%.
- It is the sole responsibility of the installer to determine the suitability and compatibility of the adhesive for the user's intended use.

CLEAN-UP

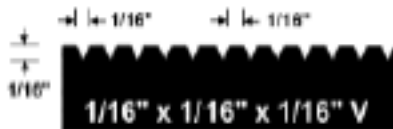
Remove wet adhesive immediately with a damp cloth. Use Mineral Spirits to remove dried adhesive. **CAUTION: Mineral Spirits are flammable. Read and follow all precautions on container label.**

ADDITIONAL DETAILS

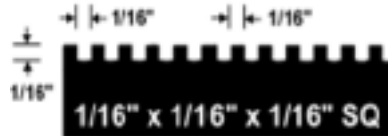
- Shelf life is two years in un-opened container.
- Coverage is approximately 125-175 sq. ft. per gallon or 13-20 sq. yd. per gallon for non-porous substrates. Coverage is approximately 100-150 sq. ft. per gallon or 10-15 sq. yd. per gallon porous substrates.
- Cleanup using soapy water followed by mineral spirits. **DO NOT APPLY SOLVENT DIRECTLY TO FLOORING MATERIAL.**

TROWEL RECOMMENDATION

Non-Porous Substrates



Porous Substrates



ADHESIVE WARRANTY

Parterre Flooring Systems offers a limited warranty for this product when used in accordance with printed specifications. A copy of the limited warranty can be obtained by contacting Customer Service.

TILE AND PLANK ON WALLS

Most vertical surfaces may be suitable as substrates for Parterre Flooring Systems solid vinyl tile and plank flooring under the following conditions with no guarantee or assurance by Parterre

Flooring Systems for successful and/or satisfactory results and with no liability to Parterre Flooring Systems for unsuccessful and/or unsatisfactory results.

Apply to structurally sound, solid, adhesive receptive surfaces with a non-staining contact adhesive. **IMPORTANT: Check with local fire codes as to suitability and restrictions.**

TILE AND PLANK LAYOUTS

- The layout of large commercial installations of Parterre Flooring Systems solid vinyl tile and plank flooring (large open areas, hallways, etc.), may require the use of a transit, laser or other tools with minimal deviation when striking accurate guidelines.
- Preplanning should enable the layout to be done economically, minimizing waste.
- Installations in long hallways with adjoining rooms should be carefully planned so that one half the tile width/plank width or an equal tiles/planks are positioned on opposing sides and in doorways with as wide of a cut as possible that allows for a balanced installation.
- Tile/plank size sometimes may have to be altered in the doorways of adjoining rooms to avoid small cuts at the walls in the adjoining rooms or doorways. These decisions should always be approved by the architect, Designer or end-user.
- Often, in smaller rooms, the perimeter is highly visible. Care should be taken to attempt uniform cuts on opposing walls, try to make the cuts on all four walls equal and as large as possible for best results when installing the Parterre Flooring Systems solid vinyl tile and plank flooring.
- Layout of planks in length should be installed with a minimum of 6" offset from adjacent rows. DO NOT create a pattern with the offset when working from row to row, offsets should be RANDOM to avoid creating a pattern that not only takes away from the aesthetics, but can become an unnecessary burden for the flooring installer attempting to maintain the integrity of the pattern throughout the installation.

TILE AND PLANK INSTALLATION

On the backside of each vinyl tile there is an arrow indicating the direction in which the tile should be placed, which the designer or end-user can use as a guideline for installation. A monolithic or quarter-turned design is the decision of the architect, designer or end-user.

Note: The product HardCore Mesa has specific directions that can be found online at parterreflooring.com under Technical >Installation>Pattern Instruction-HardCore Mesa.

- Before installing Parterre Flooring Systems solid vinyl tile and plank flooring, verify that all the cartons are clearly marked with the same batch/run numbers to avoid any problems during installation. In addition, always, work from at least two cartons at a time blending the tiles from those cartons to ensure minimal shade variations creating a consistent, uniform installation in shade, gloss and pattern.
- Utilizing the instructions for accurate Parterre Flooring Systems solid vinyl tile and plank flooring layout, follow the lines created for installation using a stair-stepped, pyramid configuration so that the tiles/planks are installed systematically using the cradle for tile/plank alignment created by the stair-step configuration from row to row. This technique not only simplifies placement of each tile/plank, but enhances accuracy immensely without the burden of extra time.
- Parterre Flooring Systems solid vinyl tile flooring may be installed in a checkerboard fashion making sure that all the tiles running north and south are uniform and in one direction (not reversed 180°) and that all the tiles running east and west are uniform and in one direction (opposite of north and south and not reversed 180°). If tiles must be installed with all tiles in one direction, ensure that NO TILE is reversed a 180°.
- Tiles should fit net at all edges and align squarely at each corner or juncture of four tiles.
- Planks should fit net at all side edges and end seams creating a true, square installation.
- When runoff occurs due to uneven underfloor surfaces or undulation, extra care and time must be devoted during installation to manipulate each tile for the best fit. Failure to prep the subfloor/underfloor so that it conforms to ASTM F710 for concrete and other monolithic floors will not only increase your installation time, but will challenge your installation skills. Failure to manage the installation so that it appears

to be net and square may also jeopardize the finished project. Again, this issue is not considered a warranty or product defect.

- Scribe tiles or planks to walls, door jambs, columns, cabinets, floor outlets and other stationary vertical surfaces to produce clean, tight junctures between the tile or plank and the structure, obstacle or stationary vertical surface.
- Tiles or planks should be centered under doors where the tile meets dissimilar floor finishes.
- Continue Parterre Flooring Systems solid vinyl tile and plank flooring under any movable partitions, stationary furniture or open cabinets without any disruption to the tile pattern's installation.
- As the tile or plank flooring is installed, roll in both directions with a minimum 100# three section roller. At the room perimeter, room edges or under toe kicks use a three-section hand roller or under toe kicks a metal seam roller works best. This step is necessary to flatten the trowel ridges so they create a uniform membrane of adhesive for optimum bond and eliminating the risk of trowel ridges telegraphing through the finished floor.
- Immediately install all reducer/transition strips at unprotected or exposed edges that could be easily damaged where the flooring stops. If for any reason the reducers or transition strips are not available to install, use sacrificial tile remnants or scrapes at the exposed edges by temporarily taping in position to avoid aggravating damage that may require a tile replacement to finish the job.
- Traditional utility knife blades are recommended for scoring and snapping straight cuts of the Parterre Flooring Systems solid vinyl tile and plank flooring. In addition to traditional utility knife blades, resilient tile cutters may be used.

WARNING: DO NOT leave heavy objects such as roller, adhesive bucket, carts, tool boxes, carts or dollies with small casters or wheels on the tile carts on the finished floor after installation.

PROTECTING POTENTIAL WET AREAS IN RESTROOM SPACES

When installing Parterre luxury plank and tile in a bathroom environment that is prone to moisture, it is important to protect the area from potential condensation issues. Below is a guide to ensure moisture resistance while installing Parterre luxury plank and tile in a bathroom.

PREPARATION

If possible, lay out the Parterre luxury plank and tile so that the length of the product runs parallel to the length of the tub or shower. When working with plank (if the layout allows), start with the width of a full plank at a tub or shower. If working with tile, always make the cuts next to the tub or shower as wide as possible while still allowing a large cut tile on the opposing side of the tub and/or shower. Be sure to use Parterre Royal Epoxy under all of the flooring in the bathroom's potential wet area. Using this epoxy will assure a tenacious bond if water does migrate under the flooring, as the Parterre Royal Epoxy is highly resistant to moisture.

In addition to the use of Parterre Royal Epoxy under the Parterre luxury plank and tile in potential wet areas, it is also imperative to caulk the flooring at the juncture of the tub/shower, toilet, baseboard and toe-kick or end panel at the cabinet.

CAULKING THE FLOORING

Always use a high-quality silicone caulk. Using a tape such as 3M Blue Painter's tape, or something similar, allows you to tape the flooring at the juncture of the vertical surface.



Also, position the tape of the vertical surface so 1/8" is exposed on the floor and vertical surface after tape is positioned. Caulk at the juncture of the floor/vertical surface, and then smooth using your finger (dampened with water) so the bead is smooth, uniform and covers the exposed area.



Immediately after, carefully remove the tape leaving a small, clean caulk line at the flooring and the juncture of the tub/shower, toilet, baseboard or cabinet toe-kick/end panel.

Allow to dry. This simple step will seal the area, so moisture does not risk damage to any wood components, such as wood underlayment, baseboard/shoe molding or cabinet's toe-kick or end panel.



POST-INSTALLATION PROTECTION

- Protect the newly installed Parterre Flooring Systems solid vinyl tile and plank flooring from foot traffic for 24 hours.
- Prohibit heavy traffic and rolling loads on the floor tile/plank for a minimum of 72 hours after installation.
- Confirm or equip all furniture, appliances, carts and any other moveable equipment with soft, wide, non-staining casters or floor protectors with a minimum diameter of 1" engineered to protect hard surface flooring from indentation from static loads.
- Always use runways made from at least 1/4" plywood or 1/4" Masonite™ to protect flooring from damage that may occur when moving heavy objects across the flooring. You may also use furniture moving aids or specialty equipment designed specifically for the use of moving large objects without damage to the floor. AIRSLED® would be an example of that type of equipment.
- If the project is still under construction the floor should be protected from other trades during construction. Be cautious with protective coverings over installed floors that might stain, yellow or stick to the flooring. To avoid large chards, stones, construction debris or heavy soil, tape the paper's edges with a releasable, non-staining, non-yellowing tape. Also, if large plywood formats are to be used on the paper, again tape its edges to the paper to avoid an accumulation of dirt or debris under the plywood's edge. Heavy traffic could embed the debris into the flooring's surface causing permanent damage.
- Avoid flooding or washing the newly installed Parterre Flooring Systems solid vinyl tile and plank flooring until the adhesive has fully cured-approximately 5-7 days, or longer depending on room temperature and the temperature of the underfloor. Stripping is not required nor is it recommended for initial cleaning.
- Please note that the initial cleaning of an installed Parterre Flooring Systems solid vinyl tile and plank flooring is essential before occupancy. Failure to clean thoroughly and properly at this time will make routine maintenance more difficult.
- Sweep or vacuum thoroughly to remove all dust, dirt, loose grit, soil and debris.

- Spots of adhesive can be removed with a clean, white cotton cloth and dampened with paint thinner or mineral spirits. Always use caution when handling flammable solvents.
- If the flooring was subjected to excess dirt, soil and heavy traffic before the initial maintenance, use Hilway Direct Neutral Cleaner mixed according to label instructions with clean potable water. **DO NOT USE ABRASIVE CLEANERS.**
- Use a standard scrubbing machine or an automatic scrubber equipped with the proper color of pad for the soiling to be cleaned. Test to make sure the pad selected does not damage the flooring tile's surface.
- Rinse using a clean mop and clean water. Change rinse water often to avoid leaving a dirty residue.
- Wet vacuum, fan dry or simple allow it to dry naturally without any traffic.